

REMARKS:

In the outstanding Office Action, claims 1-3 and 13-15 were rejected, and claims 4-12 were objected to. Claims 1, 4, 6, 10, 13 and 14-15 have been amended for clarification. New claim 16 has been added. Thus, claims 1-16 are pending and under consideration. No new matter has been added. The rejections are traversed below.

EXAMINER'S REQUEST TO CORRECT SPECIFICATION:

At page 2 of the outstanding Office Action, the Examiner requested that Applicants correct any errors in the specification of which the Applicants becomes aware.

The Applicants have checked the specification and amended the same to correct the minor errors therein.

REJECTION UNDER 35 U.S.C. §112:

The Examiner indicated that claims 14 and 15 are indefinite for using the phrase "etc.". Claims 14 and 15 are hereby amended for clarification.

Therefore, withdrawal of the rejection is respectfully requested.

ALLOWABLE SUBJECT MATTER:

At page 2 of the outstanding Office Action, the Examiner indicated that claims 4-12 are objected to as being dependent upon a rejected claim base but would be allowable if rewritten in independent form.

Claim 4 is herein amended to be in independent form and therefore is allowable. The objection to claims 5-12 that now depend from independent claim 1 directly or indirectly is traversed below.

REJECTION UNDER 35 U.S.C. §102(e):

In the outstanding Office Action, claims 1-3 and 13-15 are rejected under 35 U.S.C. §102(e) as anticipated by U.S. Publication No. 2002/0095624 ('624).

'624 discusses testing a computer bus using a bridge chip with a freeze-on-error option to permit a central processing unit (CPU) to recover and continue processing when there is an error within the computer bus.

The present invention is directed to a pseudo I/O system and method for simulating various types of target devices by arranging a setting file.

The Examiner seems to compare the '624 testing system requiring connection of various adapters and configuration of parts connecting the adapters with the pseudo I/O device of the present invention. As shown in FIG. 1, the '624 system requires a computer bus (112) to be connected to storage devices (120) via an input adapter (118), and a bridge chip having a freeze-on-error option (154) to connect the storage devices (120) to the computer bus (112) through the input adapter (118) (see, paragraph 24 of '624). Further, a communications adapter (134) is provided to connect the computer bus (112) with the network and a user interface adapter (136) connects the computer bus (112) to other user interface devices, such as a keyboard, a speaker, a mouse, etc. (see, paragraph 24 and FIG. 1 of '624). This means that various adapters and configuration parts connecting the various adapters are required for implementing the '624 system.

In contrast, "a pseudo I/O unit" processes a command from a device to be tested "when the contents corresponding to the command are set when referencing the setting file" and includes, "performing a normal reply process when the contents corresponding to the command are not set" (claims 1 and 13), where "only one pseudo I/O unit is provided in the pseudo I/O system" (see, independent claim 1 of the present application). This enables a low cost pseudo I/O system for simulating an actual I/O system and conducting a test while performing operations of those of an actual I/O system in use. The '624 system does not teach or suggest, "a pseudo I/O unit" processing a command received from a device to be tested.

The Examiner also compares the "a setting file" of the present invention with firmware of '624. The '624 system verifies an error, such as a data parity error, that can be communicated into a PCI slot (see, paragraph 35 of '624). The '624 reference states that other types of errors may be injected into the PCI slot depending on the firmware of the computer system (see, paragraph 35 of '624). This means that the types of errors in '624 are limited to the firmware of *the computer system* (i.e. written onto the read-only memory).

According to the present invention, "a setting file" is provided to "a pseudo I/O device" of the pseudo I/O system for simulating an actual I/O system. The '624 system does not teach or suggest, a pseudo I/O device comprising "a setting file" where contents of a pseudo target are defined and set.

The Applicants respectfully assert that each and every element as set forth in claims 1 and 13 is not described in the '624 reference.

Moreover, independent claim 13 directed to a pseudo I/O method for simulating an actual I/O device by making a connection to a device to be tested is hereby amended to recite allowable subject matter of dependent claim 4 (now independent claim 4), and thus amended

independent claim 13 is allowable.

It is submitted that the independent claims 1 and 13 are patentable over '624.

For at least the above-mentioned reasons, claims depending from independent claims 1 and 13 are patentably distinguishable over '624. The dependent claims are also independently patentable. For example, as recited in claim 3, the pseudo I/O device of the present invention includes, "a processing unit deleting predetermined set contents or restoring the set contents to normal set contents ... and automatically performing a normal reply process at a next time". The '624 system does not teach or suggest, "a processing unit deleting predetermined set contents or restoring the set contents to normal set contents ... and automatically performing a normal reply process at a next time".

Therefore, withdrawal of the rejection is respectfully requested.

NEW CLAIMS:

New claim 16 have been added to emphasize a pseudo I/O method simulating an actual I/O device including, "setting a simulated response file having contents of an error of a pseudo target" and "referencing the simulated response file and processing a command from the device to be tested according to the set contents in the simulated response file when the set contents of the simulated response file correspond to the command for simulating the actual I/O device". Further, the method includes generating "a hardware error ... when error contents of the hardware are set in the simulated response file". This provides simulation of various types of target devices by using a simulated response file (or a setting file), and enables a test to be conducted while performing operations of a device in actual use by setting the simulated response file via an interface different from an interface to be tested.

It is respectfully asserted that the features recited in new claim 16 are not taught or suggested by the '624 system, and thus claim 16 is allowable.

CONCLUSION:

In accordance with the foregoing, claims 1, 4, 6, 10, 13, 14 and 15 have been amended. New claim 16 has been added. Thus, claims 1-16 are pending and under consideration.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

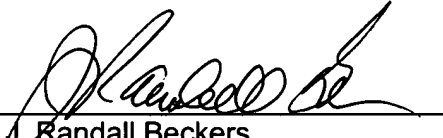
If there are any additional fees associated with the filing of this Amendment, please

charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 9/24/4

By: 
J. Randall Beckers
Registration No. 30,358

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501